A new structure for the financing of Belgium's Regions and Communities through personal income tax

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Re-Bel initiative Rethinking Belgium's institutions in the European context

TOWARDS A MORE EFFICIENT AND FAIR FUNDING OF BELGIUM'S REGIONS?

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The Re-Bel initiative aims to rethink in depth, in an open, rigorous, non-partisan way, what the institutions of the Belgian federal state - or of whatever else this part of the world needs to become - can and must look like in the longer term, taking full account of the evolving European context.

The Re-Bel initiative does not aim to produce one programme or manifesto to which everyone involved could subscribe. Its ambition is rather to provide a fertile intellectual environment in which new ideas and promising initiatives of all sorts can germinate and develop, with a concern for their relevance to a thorough reform of Belgium's institutions, but also to the institutional design of other complex polities, most obviously the European Union.

The Re-Bel initiative involves scholars from all Belgian universities, runs a web site, publishes e-books and organizes workshops and public events. It intends to associate to its activities both foreign colleagues and the Brussels-based international community. The working language will usually be English.

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Table of contents

Introduction

Paul De Grauwe (KULeuven) and Mathias Dewatripont (ULB)

This E-book contains revised versions of two pieces on tax decentralization in Belgium, written respectively by Namur and Leuven researchers, which were presented in a Re-Bel meeting in December 2009. It ends with a comment co-written by a discussant of that session (André Decoster) and Philippe Van Parijs.

The decentralisation of Belgium has led to a situation in which the Communities and the Regions now manage about 25% of total government spending (including social security). As a result, Belgium has become a federal state very much like Germany. This substantial spending power, however, is not translated into an equally important taxing power of the Communities and Regions. The largest part of the revenues of these regional entities takes the form of transfers from the federal government, leaving very little scope for an autonomous power to tax. The latter has remained firmly in the hands of the federal government and parliament.

The fact that the regional authorities possess less taxing than spending power is not necessarily a bad thing. Taxation often leads to "externalities", i.e. taxation by one entity (e.g. a region) affects revenues of another entity (region). The reason is that those who pay taxes may move their activities. This phenomenon can set in motion tax competition leading to a decline in revenues. This is the most important reason why the Belgian process of devolution has been an asymmetric one, i.e. one allowing for large transfers of spending power not matched by a transfer of taxing power to the regional entities.

A growing consensus has emerged among economists that this asymmetry has gone too far and that it makes good governance difficult. This is made very clear by the contribution of the Leuven and Namur researchers who develop an at-first surprisingly similar analysis of the problem.

Not so long ago, it would have been very difficult for Flemish and Francophone researchers to converge about the way to reform the financing system of the Belgian regions and communities. After comparing the CERPE and the CES-VIVES proposals for reform of the financing mechanism of Belgium's regions and communities that are developed in this e-book, one is struck by the degree of convergence in thinking achieved in both parts of the country. Both the Leuven and Namur researchers come to the conclusion that the present financing system of communities and regions stands in the way of good governance. The reasoning is the following.

In the present financing system, most of the revenues of the regions and the communities come from grants from the federal government. These grants increase yearly as a result of inflation and GDP growth. Thus efforts by a region to expand regional economic activity and the regional tax base do not directly affect the regional government's revenues. It does this only indirectly by increasing Belgium's GDP. The benefits of this policy are then shared by the other regions. These externalities may discourage regions from introducing structural reforms aimed at boosting regional economic activity. (We hasten to add here that during the discussion of these proposals at the December 2009 Re-Bel meeting, several observers noted that it is not clear how these macro-incentives really affect the decisions of politicians at the micro level; this point is detailed in the Decoster-Van Parijs comment).

In the view of the Leuven and Namur researchers, it is even worse than that. When a region successfully increases regional economic activity and, in so doing, raises per capita income, it loses revenue from the revenue equalization system. Thus, good regional governance is penalized. The two teams of researchers from Leuven and Namur concur that this is reason enough to change the system.

Both teams of researchers also concur on the basics of how to reform the financing system. The centre piece in both proposals is the introduction of a regional personal income tax system. This means that the yearly variations of regional revenues would be determined by the variations of the regional tax base, and not as today by the variations in the federal consumer price index and GDP. Thus, efforts by the regional authorities to boost regional economic activity would be rewarded by increased revenues.

In addition both proposals agree that the rate setting power, i.e. the power to set the personal income tax rates, should remain in the hands of the federal government and parliament.

A move towards a regional personal income tax system creates the risk of more regional income inequality. That is why both proposals agree on the need to maintain a solidarity mechanism with the following features. Regions that fall below a certain threshold in terms of their per capita income should receive some compensation from the others. This compensation scheme should be such that it does not lead to a perverse mechanism whereby a region that improves its per capita income is punished by less revenue.

There are of course also differences between the two proposals. The most important ones are the following. First, in the Leuven proposal the solidarity mechanism is organized "horizontally", i.e. the region falling below the threshold obtains compensations directly from the other regions. In the Namur proposal this compensation is organized "vertically", i.e. the federal government provides for the compensation. The importance of this difference can be debated. While one could think that it is of second order compared to the principle that such compensations should exist and that the anomalies in the present compensation system are eliminated, Decoster and Van Parijs argue it is not, and propose a hybrid solution which is neutral in terms of incentives while being in their view simpler and more transparent.

Second, the Leuven proposal goes a step further than the Namur proposal in that it also wants to change the nature of the VAT-grants to the communities. In the Leuven proposal the grant would become a fixed percentage of the federal VAT-revenues. This would make it a true shared tax. The Namur proposal does not envisage changing the VAT-grant system to the communities. It is not immediately clear what the advantage is of such a change. Probably its simplicity, and maybe the fact that the risk of volatility of the VAT-revenues are shared equally between the federal government and the communities. This is not the case in the present system.

As stressed earlier, we are impressed by the degree of agreement between the two proposals, both at the level of the analysis of the shortcomings of the present Special Financing Act and at the level of the proposals made to change it. We add some comments that should help stimulate the discussion.

The dimension where further research is clearly needed concerns the economic implications of the suggested reforms. The simulations included in the two pieces differ radically in this respect: the Namur piece assumes away any impact on employment, looking at a 'ceteris paribus scenario'; instead, the Leuven piece assumes a strong positive employment response. This makes the details of the two pieces hard to compare at this point. And since, as far as politics is concerned, 'the devil will be in the detail', it would be very useful to be able to compare the two scenarios under similar macroeconomic assumptions.

Both proposals put a lot of emphasis on improving incentives of the regional entities. Better incentives will make better governance possible. As economists, we find little to object to this. However, one can also sometimes overestimate the importance of incentives. These are necessary for making better governance possible but they are not sufficient.

The main problem we face today in Belgium is the centrifugal force pulling the two linguistic communities apart. These centrifugal forces have different causes. One is political and finds its origins in the fact that Belgian politicians now have an exclusive regional allegiance making it very difficult for them to defend a "Belgian interest". Whether this is good or bad is not the issue here. It is just a fact that helps explaining the centrifugal forces. A second cause of centrifugal forces is sociological and cultural. There was a time when the Flemish elite had a strong affinity to French culture and mixed easily with the Belgian establishment. This created a glue that helped keep the country together. Today the Flemish and French elites have drifted apart. There is no such thing as a Belgian elite anymore. Again whether this is good or bad is not the issue. It helps explaining the centrifugal forces.

The centrifugal forces can become strong enough to overpower the incentive effects stressed by the Leuven and Namur researchers. Thus even if we fix the governance of the financing system by giving better incentives, which is a very good idea, this will not by itself be sufficient to keep the country together. So let's reform the financing law; good governance is always better than bad governance. But let's keep in mind that good governance may be a weak force compared to the strong centrifugal forces now at work.

Lead Pieces

A new structure for the financing of Belgium's Regions and Communities through personal income tax: The CERPE Model

Robert Deschamps, Christophe Ernaelsteen, Michel Mignolet, Marie-Eve Mulquin and Alexandre de Streel (FUNDP)

1. INTRODUCTION

Many people, academics[1] and politicians alike, call for a reform of the financing of the Belgian Regions and Communities to ensure more efficiency and responsibility. In particular, it is suggested to reform the current sharing of the Personal Income Tax (PIT) between the federal and federated entities (Regions and Communities) and the equalization mechanism.

This paper proposes a reform of the Special Finance Act of 1989 as lastly amended in 2001 (SFA) in order to meet several economic principles of good governance. It focuses on the PIT revenues *sensu lato* which are transferred from the federal level to the Regions and the Communities according to the SFA (PIT grant *sensu stricto* to the Regions, equalization mechanism, reduction of grants due to the transferred taxes i.e. Lambermont negative term[2], additional PIT grants for transferred competences[3], and PIT grants to the Communities). We estimate that such PIT revenues will amount to 15.4 billion EUR in 2010.

Our proposal does not deal with the VAT revenues transferred to the Communities (estimated at 13 billion EUR in 2010) through a sharing system based on the needs of the respective schooling systems in each Community. Moreover, it is constructed *ceteris paribus* with unchanged distribution of competences between the federal level and the Regions and Communities as the optimal allocation of competence is a separate debate.

The paper is as follows. Section 2 confronts the SFA with some principles of fiscal federalism, Section 3 presents our proposal for a shared PIT, Section 4 illustrates the implementation of the proposal, and Section 5 concludes.

[1] See for instance Algoed (2009), Algoed et al. (2008), Kirsch (2008), Verdonck et al. (2009).
[2] Compensation for the revenues of the federal taxes transferred to the Regions.
[3] Agriculture and sea fishing, scientific research in agriculture, trade, and provincial and municipal law.

2. *AN ASSESSEMENT OF THE SPECIAL FINANCE ACT IN THE LIGHT OF SOME PRINCIPLES OF FISCAL FEDERALISM*

The evolution and the current system of the Special Finance Act have been extensively dealt with (see for instance, Deschouwer and Verdonck (2003), Pagano (2002), Van Der Stichele and Verdonck (2001). On the basis of some principles of fiscal federalism (as summarised by Oates, 1999), we conclude that some parts of the SFA need to be corrected, others need to be maintained, while others still need to be added.

Firstly, different provisions of the SFA need to be corrected:

- The SFA creates horizontal externalities between regions[4] as the economic performance of one region influence the PIT grants of the other regions. Hence there is no direct link between economic performance and PIT revenues (see Chaidron et al., 2009: 34-35).
- The SFA equalization mechanism induces a perverse effect as when a region improves its economic performance, the decrease in the revenues generated by the equalization mechanism is more important that the increase in revenues related to a larger share of the PIT grants. This leads to a 'development trap' as first shown by Cattoir and Verdonck (1999) and well documented since then (Algoed, 2009; OECD, 2009:70-71)[5].

Secondly, elements of the SFA need to be maintained from our perspective:

- Currently, the use of the tax autonomy by one region does not directly[6] affect the revenues of the other regions. Moreover, boundaries to the tax autonomy of the regions have been set to alleviate harmful tax competition (race to the bottom)[7].
- In the framework of the SFA, the federal level is in charge of the interpersonal and institutional solidarity. In particular, it is responsible to determine the marginal rates of the PIT, hence the scale of progressiveness. The federal level is also in charge of the vertical equalization mechanism.

Thirdly, in our view, elements could be added to the SFA:

- The Brussels region as administrative and economic capital city of the federation incurs extra costs due to the numerous commuters who consume public services in Brussels while their PIT is only returned to federate entities of their residence place (also OECD, 2009:67).
- With the SFA, the federal level will be confronted with a structural deficit. Indeed, the future cost of ageing will mainly be supported by the Entity I comprising the federal level and social security (OECD:2009: 63)[8]. As a consequence, according to the Federal Planning Bureau, the needs of financing of the federal level will be proportionally much more important than the needs of the Regions and Communities[9].

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[4] The term "Region" refers to the political entity whereas "region" refers to the territorial entity.

[5] This effect is observed for the Walloon Region and for the Brussels-Capital Region. However, when the Walloon Region, the Brussels Region and the French-speaking Community are consolidated, the development trap is not observed any more.

[6] It could be the case indirectly if there is an interregional move of the population due to the change in taxation.

[7] Art.9(1) of the SFA provides for the possibility of regional tax autonomy within a limit of 6.75 % of the PIT. However, the Regions have not yet used this possibility to a large extent.

[8] Another reform, which is independent of the proposals made here, could be that the Regions and Communities support an additional part of the retirement benefit of their officials: as recommended by OECD (2009:76). That implies a reform of the Special Act of 5 May 2003, *M.B.*, 15.5.2003, p. 26 434.

[9] Economic Forecast 2009-2014 of the Federal Planning Bureau.

3. *THE CERPE PROPOSAL TO REFORM THE SFA*

3.1. *A Shared PIT with a revised equalization mechanism*

On the basis of this analysis, we propose to replace the current PIT grants *sensu lato* by a new mechanism of sharing the PIT revenues between the federate entities and the federal level. .For simplicity, we consolidate on a territorial basis the Regions and the Communities and leave to each territorial authority the responsibility of sharing its means between Regions and Communities[10].

The mechanism of sharing the PIT revenues rests on four steps.

<u>Step 1: The Regional and Proportional PIT (RP-PIT)</u>

The main part of the new PIT revenues of a region is made up of a Regional and Proportional PIT levied on the region's citizens (the so-called RP-PIT). The federal level stays in charge of determining the tax schedule and the progressiveness of the PIT's rates and remains responsible for collecting the PIT. It transfers to each region the RP-PIT that is owed and keeps the rest.

At the beginning of the implementation of the system, all regions have the same RP-PIT rate (the reference RP-PIT rate) and each taxpayer pays the same PIT as previously. Afterwards, each region may decide to change the RP-PIT rate of its territory. If a region decides to lower its rate, its citizens pay less taxes and the region receives less PIT revenues. Conversely, if a region decides to increase its rate, its citizens pay more taxes and the region receives more PIT revenues. In addition, the regions may also give to their citizens' tax credits that are related to their exclusive competences. If they do so, they receive less PIT revenues. However, the regional tax autonomy is exercised within certain limits which are decided by consensus[11].

On the one hand, as the main PIT revenue of each region is explicitly linked to its tax base, the proposed system ensures a direct link between the economic performance of a region and its revenues. It also guarantees the independence of these revenues with respect to the performance of other regions (there are no more horizontal externalities).

On the other hand, any change of the PR-PIT in one region only affects its own resources and does not impact the resources of the other regions.

<u>Step 2: A vertical equalization (solidarity) mechanism</u>

Our proposal provides for a vertical equalization mechanism in favour of the less developed regions. Additional resources are granted to partly compensate a tax base *per capita* that is below the national tax base *per capita*.

The equalization mechanism for the region *r* can be set up as follows:

$$\gamma \times a \times \left[\frac{\sum_{i=1}^{3} TB_i}{\sum_{i=1}^{3} P_i} - \frac{TB_r}{P_r} \right] \times P_r$$

[10] In the rest of this contribution, "region" refers to the territorial entity, whereas "Region" (with a capital letter) means the political entity.

[11] If it is decided to maintain the same boundaries provided in Art. 9 SFA (i.e. 6.75 % of the PIT), boundaries of 1.4% of the RP-PIT should be adopted.

Where γ is the compensation rate of the difference between the national tax base *per capita* and the regional tax base *per capita* of the region *r*,
α is the base rate,
TB_i is the tax base of the region i,
P_i is the population of the region i.

This mechanism removes the 'development trap' (as shown in Chaidron et al., 2009: 38-39)[12]. It is vertical to ensure that institutional solidarity remain the responsibility of the federal and be stable over time.[13]

<u>Step 3: A stable compensation basis to ensure fiscal neutrality in the first year</u>

A fixed compensation ensures fiscal neutrality with the current SFA the first year of implementation. By assumption, this compensation remains unchanged over time, hence it is neither adapted with inflation nor with growth.

<u>Step 4: The possibility of an additional financing for the Brussels region and the federal level</u>

Finally, our proposal allows for an additional financing by the federal level to the Brussels region in order to take into account its charges as the capital city of the federation[14]. It also allows for a progressive additional financing of the federal level, by the different regions in proportion of their tax bases, to take into account of the future costs of ageing that will mainly be supported by the federal level.

3.2. *An assessment in the light of the fiscal federalism principles*

Our proposal meets several principles of good governance.

(1) *Transparency and simplicity* of the RP-PIT system, which in turn leads to accountability of the public authorities, as our proposal replaces a complex system of grants.

(2) *Responsibility* of the Regions and the Communities as our proposal removes horizontal externalities between regions and corrects the pervert effect of the equalization mechanism. Moreover, our proposal allows for a federal financing of the Brussels region to compensate the consumption of the public services by commuters and other costs linked to its role of capital city.

(3) *Correction of vertical imbalances* as our proposal replaces the grant system by a shared PIT and ensures that the future costs of ageing are taken into account.

(4) *Regional tax autonomy without harmful tax competition* as our proposal maintains by assumption the boundaries set up in the current SFA.

(5) *Interpersonal and institutional solidarity* at the federal level as our proposal ensures that the progressiveness of the PIT remains decided by the federal level and that equalization mechanism stays vertical.

Next to those principles, our proposal ensures a fiscal neutrality of the system for the first year of its implementation.

[12] This is not the only way to suppress the 'development trap' The OECD (2009:76) suggests to simply reduce the amount of equalization of the current SFA. However, this option cannot guarantee the disappearance of the development trap for any growth scenario unless the equalization is reduced to a very small amount.
[13] Heremans et al. (2008), and Verdonck *et al.* (2009) are in favour of a horizontal equalization mechanism.
[14] The OECD (2009:76) suggests an extra financing of the Brussels region by allocating (partially) the shared income tax to the region where the firm of the worker is located ('workplace principle').

4. AN EXAMPLE OF IMPLEMENTATION FOR THE PERIOD 2010-2015

4.1. The current SFA revenues taken into account

Under the assumptions detailed in Annex, the implementation of the current SFA leads to PIT revenues for the Regions and Communities of 15 439 million EUR in 2010 and of 18 899 million EUR in 2015.

Table 1a. PIT grants for the Regions in 2010 according to SFA (millions EUR)

	Brussels Region	**Flemish Region**	**Walloon Region**	**Total**
PIT grant *sensu stricto*	1 050	8 000	3 562	12 612
Equalization mechanism	312	-	830	1 142
Reduction of grant for transferred taxes: Lambermont negative term	-488	-2 604	-1 113	-4 205
Additional grant for transferred competences	3	132	87	223
Total	877	**5 528**	**3 366**	**9 771**

Source : CERPE.

Table 1b. PIT grants for the Communities in 2010 according to SFA (millions EUR)

	French speaking Community	**Flemish speaking Community**	**Total**
PIT grant	**1 960**	**3 708**	**5 668**

Source : CERPE.

Table 2a : PIT Grants for territorial regions in 2010 according to SFA (million EUR)

	Brussels	**Flanders**	**Wallonia**	**Total**
PIT grant *sensu strict* to Regions	1 050	8 000	3 562	12 612
Equalization mechanism	312	-	830	1 142
Reduction of grant for transferred taxes: Lambermont negative term	-488	-2 604	-1 113	-4 205
Additional grant for transferred competences	3	132	87	223
PIT grant to Communities[15]	514	3 585	1 568	5 668
Total	**1 391**	**9 114**	**4 934**	**15 439**

Source : CERPE

[15] The PIT grants of the Communities are shared between territorial regions according to population data, with the key 80/20 to determine in Brussels, the French-speaking and the Flemish-speaking population respectively.

Table 2b: Forecast of PIT revenues and sharing between regions and the federal level according to the SFA (million EUR)

	Brussels	Flanders	Wallonia	Total	Federal level	Total PIT revenues
2010	1 391	9 114	4 934	15 439	19 644	35 083
2015	1 750	11 205	5 944	18 899	23 804	42 703

Source: CERPE

4.2. *The implemented scenario and its assumptions*

Firstly, the three regions adopt a common rate of RP-PIT of 8.37%. Such a rate ensures the same PIT financing (including equalization) than the SFA for the Brussels region in 2010. It leads to a small loss for Flanders and Wallonia.

Secondly, according to the equalization mechanism, additional resources are given to regions whose tax base *per capita* is below the national tax base *per capita*. The compensation rate is set up at 85%.

Thirdly, to ensure fiscal neutrality with regard to the current SFA the first year of implementation, additional revenues are given to Flanders (174 million EUR) and Wallonia (310 million EUR) in 2010. By assumption, those revenues remain unchanged over time.

Finally, additional financial means are progressively granted to Brussels and to the federal level. They start in 2011 to reach in 2015 respectively 100 million EUR for Brussels and 700 million EUR for the federal level. Such amounts are purely illustrative and do not prejudge of what might be objectivised[16] or negotiated before the implementation of the reform. To achieve the additional financing of the federal level, each region should contribute, on its RP-PIT revenues, at a cumulative annual rate of 0.071% of its tax base from 2011.

4.3. *The PIT resources for the regions : the implemented scenario*

With those assumptions, the CERPE proposal leads to the following results:

Table 3a: Revenues of each region, before additional financing for Brussels and the federal level (million EUR)

Step 1: RP-PIT with an identical rate at 8,37%				
	Brussels	**Flanders**	**Wallonia**	**Total**
2010	1 143	8 940	4 346	14 429
2015	1 338	10 927	5 287	17 551
Step 2: Equalization mechanism (compensation rate at 85%)				
	Brussels	**Flanders**	**Wallonia**	**Total**
2010	249	0	278	527
2015	386	0	340	726

[16] See for instance Lambert *et al.* (1999) and Van der Stichele (2003) who estimated that the additional cost of the Brussels Capital Region as capital city of Belgium and international city amounted to around EUR 490 million. See also Cattoir *et al.* (2009) and de Callataÿ (2007).

Step 3: Compensation to ensure first year fiscal neutrality in 2010				
	Brussels	**Flanders**	**Wallonia**	**Total**
2010	0	174	310	484
2015	0	174	310	484
Total of resources (without additional financing for Brussels and the federal level)				
2010	1 391	9 114	4 934	15 439
2015	1 723	11 101	5 936	18 760

Table 3b: Additional means for Brussels and the federal level (million EUR)

Step 4: Additional means for Brussels (*in fine* 100 million EUR compared to current SFA)				
	Brussels	**Flanders**	**Wallonia**	**Total**
2010	0	0	0	0
2015	184	0	0	184
Contribution of the regions to the additional financing of the federal level (*in fine* 700 million EUR compared to current SFA)				
	Brussels	**Flanders**	**Wallonia**	**Total**
2010	0	0	0	0
2015	-57	-464	-224	-745

Source: CERPE

Table 4: Total PIT revenues and comparison with the SFA (million EUR)

CERPE Proposal						
	Brussels	**Flanders**	**Wallonia**	**Total**	**Federal level**	**Total PIT revenues**
2010	1 391	9 114	4 934	15 439	19 644	35 083
2015	1 850	10 637	5 712	18 199	24 504	42 703
Comparison with SFA						
	Brussels	**Flanders**	**Wallonia**	**Total**	**Federal level**	**Total PIT revenues**
2010	0	0	0	0	0	0
2015	100	-568	-232	-700	700	0

Source: CERPE

4.4. The Robustness of the proposal

In Deschamps et al. (2009: 705-709), we show that the CERPE proposal is sufficiently robust with variations of the RP-PIT reference rate, of the equalization compensation rate, or the amounts for the additional financing to the Brussels region and/or the federal level. It is also robust with changes in assumptions regarding the growth rate or the tax bases.

5. *CONCLUSION*

This paper proposes a reform of the Special Finance Act in order to ensure that the Act meets several good governance principles: transparency and simplicity, responsibility of the public authorities, correction of vertical imbalances between the federal level and the Regions and Communities, regional tax autonomy without harmful tax competition, and interpersonal and institutional solidarity.

It proposes to introduce a shared PIT with a regional PIT which is proportional and which replaces several PIT grants which are currently transferred from the federal level to the Regions and the Communities according to the SFA (PIT grant *sensu stricto* to the Regions, equalization mechanism, reduction of grants for transferred taxes *i.e.* Lambermont negative term, additional PIT grant for transferred competences, and PIT grant to the Communities). Such a Regional and Proportional PIT will be accompanied by a reformed vertical equalization mechanism exempt of any 'development trap'.

To ensure a smooth transition between the current SFA and the new proposed system, a fixed compensation ensures fiscal neutrality for the first year.

Finally, our proposal allows for a progressive additional financing to the Brussels region to take into account its role of capital city of the federation, and to the federal level to take into account the costs of ageing that will mainly be supported by that level.

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APPENDIX: NATIONAL AND REGIONAL GROWTH ASSUMPTIONS

Data	Source et last available data	Forecast methodology
PIT revenues	Ministry of Finance : PIT by Regions (tax year 2007, income year 2006)	**At the national level** : Economic Forecasts 2009-2014 of the Federal Planning Bureau **At the regional level** : Forecasts on the basis of past growth differential
Inflation	Ministry of Finance : CPI (May 2009)	Economic Forecasts 2009-2014 of the Federal Planning Bureau
National growth of GDP	ICN : (National Account up to 2007)	Economic Forecasts 2009-2014 of the Federal Planning Bureau
Tax base	DGSEI[17] : Tax statistics up to tax year 2006, income year 2005	**At the national level :** Evolution of the unemployment and retirement benefits according to the growth rate of the social benefits assessed by the Economic Forecasts of the Federal Planning Bureau Evolution of other income according to the growth rate of the wages assessed by the Economic Forecasts of the Federal Planning Bureau **At the regional level :** Forecasts on the basis of past growth differential
Forecasts of data in 2015		Average of growth rate for 2011-2014 (Economic Forecasts 2009-2014 of the Federal Planning Bureau)
Population	DGSIE : Data on 1 January 2008	Population forecasts of the Federal Planning Bureau 2007-2060, updated with data of 1 January 2008

[17] Directorate-General Statistics and Economic Information.

Towards a more efficient and responsible financing mechanism for the Belgian federation

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1. *Introduction*

Federalism is an ever ongoing process. After twenty years of experience with the Special Finance Act (SFA)[18] for the Regions and Communities (R&C) in Belgium, an evaluation is to be made.

Hence, we will first look into the analytical insights of federalism that underlie the SFA. Whereas the SFA refers to some traditional criteria from the normative theory of economic federalism, new insights from the political economy approach are to be taken into account in a critical evaluation. They may explain many inefficiencies in the present SFA, and help to devise a reform, taking into account aspects of efficiency, accountability and transparency.

Secondly, we present an alternative financing system (NSFA) for the R&C that captures the main critiques. The emphasis will be on responsability via direct budgetary returns giving the right incentives for regional governments to pursue activity enhancing policies. This effect of the NSFA on the activation of the labour force should be the key for a win-win reform improving the prospects of public finance for all federated entities.

2. *From a normative fiscal federalism to a political economy perspective of the Belgian SFA*

Multi-level governance in a federation involves a continuous trade-off between various criteria, the result of which may evolve over time.

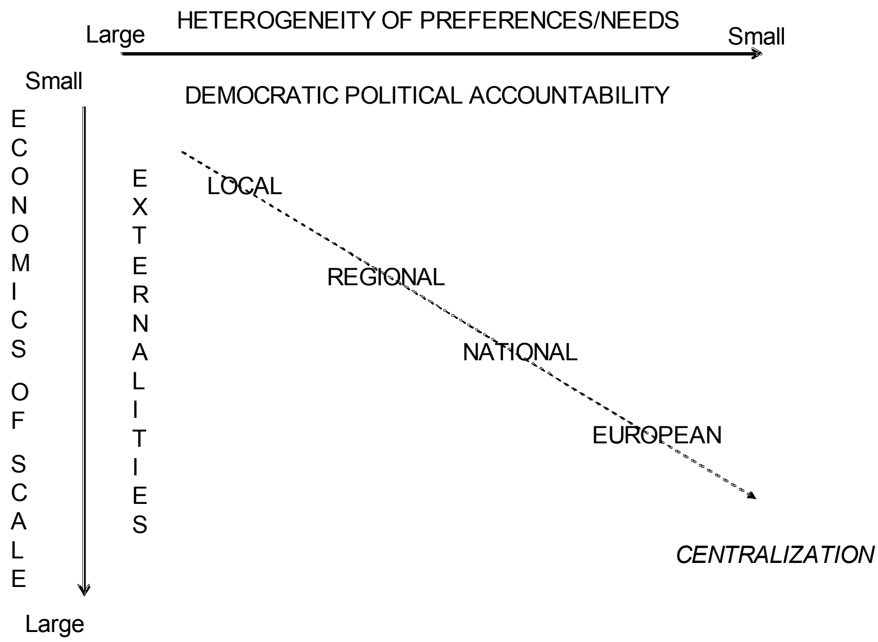
According to the (traditional) normative theory of fiscal federalism, first and foremost, a better matching of ("heterogenous") preferences is obtained by decentralization, whereas the realization of economies of scale, on the contrary, may require centralization. Also externalities, when they are complex and not to be solved by Coasian bargaining[19], have to be internalised by centralization.

An ideal system would then consist of functionally overlapping jurisdictions optimally "carved out" for each government function.[20] However, given substantial transaction costs,

[18] Special Act concerning the financing of the Communities and the Regions (1989) and its complement along the same lines, the Lambermont Agreement (2001).
[19] The Coase theorem states that when trade in an externality is possible and there are no transaction costs, bargaining will lead to an efficient outcome.
[20] In an ideal world without transaction costs individuals organize themselves for each public function in the particular size of jurisdiction which maximizes their welfare for that particular public service.

organisational costs and scope economies, such a far reaching functional decentralization appears to be unfeasible in practice. As a result, public functions will be grouped in a few types of jurisdictions, as illustrated in *Figure 1*.

Figure 1 Allocation of competences



Traditionally, the nation state, coinciding with market size, and its economic and monetary union providing the framework (internalizing the externalities) for market operations, has been the "nexus" of the previous trade-offs.[21] Due to market integration at EU level, and even at the global level, this central role is being eroded:

- it requires further centralization of market linked policies at the higher EU-level
- and it leaves more opportunities for welfare improvements by better accommodating heterogenous preferences and needs by decentralization at the lower level of the regions (subsidiarity).

In addition, arguments for decentralization have been strengthened by recent political economy approaches of fiscal federalism. As governments are no longer considered per se as benevolent social planners, decentralization may contribute to more democratic political accountability in order to discipline and check government failures. The political economy perspective may especially affect the funding of the components in a federation. Until now, this perspective has not received much attention in the debate on the Special Finance Act (SFA) for the Regions and Communities (R&C) in Belgium.

[21] Alesina, A., Spolaore, E. 2003. The size of nations. MIT Press, Cambridge, Mass.

2.1 *Funding of the components in a federation: normative theory and the Belgian SFA.*

2.1.1 Normative fiscal federalism

The *Equivalence Principle* dictates that the users of public goods and services also pay for it. Hence, the subcentral entities should have the obligation and the power at the tax side to raise the necessary revenues to match the expenditure side of their public goods provision.

However, when applying the different fiscal federalism criteria discussed above, due to externalities at the tax side, the trade-off reveals to be more complex than at the expenditure side. Indeed, fiscal decentralization may involve *externalities and efficiency distortions*:

- at the *vertical level*, tax competition may lead to an overexploitation of the shared tax base.
- at the *horizontal level*, (strategic) tax competition for a mobile tax base may lead to a "race to the bottom": as taxes are set too low it may result in an undersupply of public goods and services.

Moreover, besides the efficiency considerations to internalize tax externalities, also *redistribution and solidarity concerns* with respect to differences in tax capacities among subnational entities may point to more centralization at the revenue side. The set-up of the SFA in Belgium has been dominated by these criteria.

Hence, the commonly held notion according to the normative theory is that the revenue-raising authority should be more centralized than the expenditures authority in a federation. It results typically in a *vertical fiscal gap* between revenues and expenditures on own account at the central and subcentral levels.

2.1.2 The size of the vertical fiscal gap

The size of the vertical fiscal gap is defined by the magnitude of the cash transfers that flow from the central to the subnational governments. As Table 1 indicates, the size of the vertical fiscal gap differs widely among federations. The financing gap in Belgium for the federated entities (intermediate level)[22] amounted to 61%, and is much wider than the 38% in Austria and 15% in Canada. It raises questions, as similar trade-offs w.r.t. efficiency and redistribution are involved in other federations. Are there more dangers for tax externalities, and/or is there more need for redistribution in the Belgian federation?
At the level of local governments in Belgium, the fiscal gap of 47% appears to be smaller. Are there less dangers for tax externalities, and less redistribution needs at the local level?

[22] It can be argued that when only looking at the Regions and thus excluding Community finances from the "federated entities", the fiscal gap turns out to be lower. However, including the Communities gives a more correct and transparent view of all financing at the intermediate level. Notice that the Region of Flanders and the Flemish Community merged into one governmental entity right from the start. Including Community finances is also common practice in international comparisons.

Table 1: Vertical fiscal gap in federal states

	Share in general government spending		Share in general government revenues		Fiscal gap	
	Intermediate level	Local government	Intermediate level	Local government	Intermediate level	Local government
Austria	17.2	14.6	10.6	15.0	38.4	-2.7
Belgium	23.2	13.8	9.0	7.3	61.2	47.1
Canada	50.4	10.5	42.8	9.8	15.1	6.7
Germany	21.6	14.9	23.6	11.9	-9.3	20.1

Source: OECD, 2007: numbers of 2005

Whatsoever, more fiscal equalization (redistribution) should reduce the danger of tax externalities. Fiscal equalization reduces the incentives to lower tax rates in order to attract mobile tax bases, so that fiscal externalities are internalized (see Buettner, 2001)[23]. A horizontal equalization system, as opposed to the current vertical equalization system in Belgium, would be better suited to internalize these fiscal externalities.[24] Hence, both arguments (i.e. the existence of tax externalities and redistribution concerns) should not be cumulated in order to limit fiscal autonomy and to increase the fiscal gap.

2.1.3 Fiscal imbalances in the complex Belgian SFA

The funding of the components of the Belgian federation in the Special Finance Act, as summarized in Table 2, is very complex and certainly lacks transparency.

The outcome of very complex arrangements and political compromises is that nearly 80% of the funding of subnational governments consists of "grants", and only 20% of own taxes. It is in sharp contrast to the funding of Belgian local authorities, deriving nearly half of their financing from own tax income.
From an efficiency point of view several features of the SFA are to be questioned:

- *vertical imbalances*: relying mostly on grants, the funding of the subnational components is rather guaranteed, benefitting from a rather stable evolution over time. Residual revenue risks due to fluctuations in tax income affect mainly the federal budget. Moreover, regional revenues are not directly, nor unambiguously linked to the economic performance of the respective regions.
- *horizontal externalities*: as there is no direct link with its economic performance, the revenues of one subnational entity may be (substantially) affected by the economic performance of other entities.

[23] Buettner, T. 2001. Fiscal externalities in local tax competition: empirical evidence from a panel of German jurisdictions. ZEW Discussion Papers 01-11.
[24] In a vertical solidarity system, the first move of the richer region towards a lower tax rate, which attracts part of the tax base from other regions, would not be punished by increased solidarity payments from that region to the other regions. This argument was pointed out in: Verdonck, M. 2009. Evaluating the decentralization of tax powers: Lessons from the Belgian regions. mimeo.

Table 2: Overview of regional financing (2008)

	% of total R&C revenues	Vertical evolution	Horizontal division key
Regional taxes	20.14%	/	/
PIT grant to the Regions	21.98%	Lump sum payment[25], tied to CPI and GDP-growth	Relative contribution to federal PIT revenues
Solidarity (Revenue equalization) for Regions	2.57%	Yearly calculated lump sum payment	Underperformance w.r.t. national average of per capita PIT revenues
Miscellaneous specific purpose grants **- to regions** **- to communities**	8.37% - 5.37% - 2.99%	Constant or linked to CPI	Division keys based on expenditures in the past
PIT grant to the Communities	14.39%	Lump sum payment, tied to CPI and GDP-growth	Relative contribution to federal PIT revenues
VAT grant to the Communities	32.55%	Lump sum payment, tied to CPI and evolution of number of people younger than 18	Relative number of school-aged people (6-17 years)[26]

Secondly, the SFA also implies some paradoxical redistributive effects, as solidarity overcompensates "juste retour". Setting the national average per capita revenues at 100 for 2008, the per capita own regional and transferred personal income tax revenues by Flanders are 3.6 percentage points above the national average (as can be seen in *Figure 4* in Appendix). After the implementation of the equalization and specific purpose grants, the per capita means for Flanders drop 3.3 percentage points below the national average. The per capita revenues for the Walloon Region increase from 90% to 98.8% of the national average and become higher than the per capita revenues in Flanders. The Brussels Capital Region (BCR), starting from 111.9, ends up with 123.3 compared to the national average of one hundred.
As to the funding of the Communities, the French-speaking Community ends up with 1934 euro per capita in 2008, somewhat above the Flemish Community, receiving 1855 euro per capita in 2008 (as illustrated by Figure 5 in Appendix).
Moreover, despite the smaller per capita financial means, Flanders has contributed substantially in restoring the consolidated Belgian public finances to an equilibrium, since the budget surplus of Flanders was on average 509 million euro on a yearly basis in the period 1996-2005. The French-speaking Community and the Walloon Region registered in the same period a budget deficit of, on average, respectively 115 and 82 million euro.

The economic (efficiency) consequences of these fiscal imbalances are further to be analyzed in a political economy approach better suited to take into account incentive problems and conflicts of interest created by the SFA.

[25] Lump sum payments are based on a historically determined amount of money. Consequently, their linking to particular tax revenues of the federal government (PIT, VAT) is only fictitious.
[26] The additional means of the Communities provided by the Lambermont Agreement in 2001 (extra lump sum amounts and the proceeds of the indexing of the total VAT-grant to 91% of real GDP-growth) will from 2012 onwards be divided between the two Communities exclusively on the basis of the Region's PIT revenues. In the meantime (2002-2012) the number of school-aged people is also taken into account in order to determine the horizontal division key.

2.2 *A political economy perspective on the SFA*

2.2.1 Political economy approach of federalism[27]

In the political economy view government officials are no longer conceived of as per se benevolent social planners, but rather as political representatives subject to political agency problems. Hence, fiscal federalism has to focus on the incentives given to politicians and on designing disciplining mechanisms for good governance. It implies that the criteria determining the trade-off in normative fiscal federalism have to be supplemented and revised as:

- aggregate preference matching at the central level will be reduced through failures of the central political process
- accountability failures at the central level are to be taken into account due to stalling of the "voice" mechanisms[28], more serious information problems in monitoring and in controlling centralized decision makers.

One of the key mechanisms to improve the performance of governments is *yardstick competition*, requiring decentralization:

- it puts competitive pressure on politicians, as the presence of several competing decentralized governments empowers citizens to better discipline their political representatives into serving the interests of their constituency.
- it implies the potential to compare the results of the competing governments requiring visibility and transparency, the information being more accessible at lower government levels.

Financial responsibility and fiscal transparency are important instruments of political accountability and yardstick competition. As governments become responsible for raising their own tax revenues, the citizens/taxpayers can compare better the benefits of public service provisions with the tax burden.

Finally, it is to note that even in the absence of heterogeneity of preferences, decentralization may still be desirable in order to achieve better democratic political accountability.

2.2.2 Soft budget constraints in the SFA

Transfer dependency in the SFA presents problems of soft budget constraints for the regional governments. As the federated entities spend the money given by the federal government (chequebook federalism), they lack political accountability.
It involves several types of moral hazard problems:

- *common pool problem:* federal tax revenues are a common pool of resources. It gives incentives to use the federal budget for policies with regional benefits and stimulates an overprovision of public goods and services at the federal level. It leads to an inevitable tendency to overexploitation of the federal tax revenues (raiding of the commons).

[27] See Ahmad, E. and Brosio, G. 2006. Handbook of Fiscal Federalism, Cheltenham, E.Elgar.
[28] An enhanced civic “voice” is thought to promote greater accountability of public institutions, which improves institutions’ performances and increases their responsiveness.

- *fiscal illusion* for voters and politicians: when the governments of the federated entities call for more federal transfers, they pretend this could be done without increasing the federal tax and debt burden on their own citizens.
- *bail-out problems:* by lack of substantial own fiscal revenues, the governments of the federated entities operate with the expectation that their fiscal deficits will be "bailed out" by the federal government. Bail-out expectations create a "moral hazard" problem, as they soften the budget constraint for subnational governments and induce them to "inefficient" spending behaviour. Moreover, in case of debt accumulation at the subcentral level, they obviate the disciplining by financial markets.

The subsequent changes to the SFA in Belgium, mainly to "refinance" the French-speaking Community, are a good illustration of this overexploitation of the fiscal commons. The French-speaking Community has solved its budgetary problems by having the federal grants towards the federated entities increased. Hence, the continuing difficulties of federal public finances do not come as a surprise under the present SFA.

2.2.3 Non transparency of the SFA: economic and redistributive inefficiencies

According to the political economy view, a funding system should give the *right incentives* for *accountability*:

- to government officials, not to pursue their own interests, but to respond to the needs of their constituency and to create welfare by promoting activity enhancing investments (responsiveness)
- to citizens/taxpayers to control and monitor the behaviour of their political representatives requiring visibility and transparency

It is clear that the complex, nontransparent SFA fails in terms of accountability as it contains no clear signals and unambiguous feedback mechanisms due to externalities. When a regional government invests in activity enhancing policies, the return on its own financial means is only indirect and not predictable as it also depends on the performance of other subnational governments:

- First, at the *vertical level*, it may have a positive effect on the global volume of personal income tax (PIT) grants, by contributing to overall GDP growth. The final outcome, however, also depends upon the performance of the other governments. Moreover, the volume effect will be lower than the increase of the PIT tax base, as only the federal level will benefit from an elasticity effect larger than one.
- Second, at the *horizontal level*, it may involve a positive substitution effect provided that there is a relative change in the region's GDP (depending upon the performance of other regions) which affects its PIT revenues and hence the distribution formula.

Contrary to these complex links, accountability would require to exclude these externalities by a straightforward link, the region obtaining a percentage of its contribution to PIT revenues and not being dependent upon the other regions.

In addition, the vertical equalization system for the regions in the SFA has adverse incentive effects, as first analyzed by Cattoir-Verdonck (2002) and widely documented in more recent studies[29]. It leads to a "development trap" for the regions benefitting from equalization

[29] - Cattoir, Ph., Verdonck, M. 2002. Péréquation financière et fédéralisme. In *Autonomie, solidarité et coopération.* Cattoir et al. (eds).
- Algoed, K., Heremans, D. 2007. Financing the Communities and Regions in Belgium: Vertical and horizontal fiscal imbalances, chapter 4 in Algoed, K., Heremans, D. (eds) *The Political Economy of Fiscal Federalism. Issues of decentralisation in Belgium*, Proceedings of the Symposium of October 5th 2007, Steunpunt Fiscaliteit en Begroting.
- Algoed, K., Heremans, D., Peeters, T. 2007. Voorrang geven aan meer financieel-fiscale verantwoordelijkheid in een nieuwe staatshervorming. Leuvens Economisch Standpunten, n° 115.

(solidarity) grants, in casu Wallonia and Brussels. Any economic catching-up increasing tax revenues in one of these regions according to the "juste retour" mechanisms, leads to losses in the region's solidarity grant. This loss in equalization grant is larger than the gain in PIT grants. Hence, it is not obvious that government officials will have an interest in increasing their PIT tax base by investing in activity enhancing policies. It may also help to explain the lack of convergence in economic performance among the regions.[30]

At the redistribution level, the combination of funding and equalization in a combined system does not really contribute to the transparency of the SFA. Not only the "solidarity grant", but more importantly the transfers through VAT grants and specific purpose grants are tools of redistribution. Hence, the largest part of permanent equalization is not laid down in explicit equalization formulas like the solidarity grant, but is more or less "hidden" in the historical division keys in the SFA.
Hence, it is not surprising that the SFA does not stand up to the goals of redistribution policies in a federation[31]:

- Reducing long-term fiscal disparities across regions? The SFA overcompensates (in per capita terms) long-term differences in the relative position of a region.
- Smoothing against asymmetric macroeconomic shocks by stabilizing revenues of regional governments? It is found that interregional equalization in the SFA can only to a minimal degree be explained on grounds of macroeconomic stabilization against idiosyncratic shocks to primary income.[32]
- Redistribution in order to give incentives for growth and to promote convergence among the regions? It is clear that this objective is not met by the present SFA.

2.2.4 Conclusion: need to improve the SFA

It follows that there is a need for more transparent, accountable and efficiency enhancing arrangements in the SFA.

First, there is a need to reduce the fiscal gap by substituting (part of) the grant system by own tax revenues for the federated entities.

Second, the choice of own tax instruments should trade-off the following criteria:

- It should contribute to *visibility, transparency and accountability of government actions*. It could refer to the decentralization of income taxes and corporate taxes. However, yardstick competition would be served by maintaining a common (federal) tax base for the tax instruments.
- It should provide in *tax instruments for economic policy* competences[33] for the regions as an alternative to the overreliance on subsidies. It refers to decentralization of part of corporate taxes and income taxes.
- It should provide the *right incentives for activity enhancing policies*. The federated entities should benefit directly from improved economic activity, as would be the case when they receive directly part of corporate taxes, and personal income taxes.

- Algoed, K., Heremans, D., Van Hecke, A. 2009. De impact van vergrijzing op de overheidsfinanciën. Eindrapport Steunpunt Fiscaliteit en Begroting.

[30] - Persyn, D., Algoed, K. 2009. Interregional redistribution, growth and convergence. Vives discussion paper 4.
- Kessler, A.S., Lessmann, C. 2008. Interregional redistribution and regional disparities: How equalization does (not) work. mimeo.

[31] Van Hecke, A. 2009. Revenue equalization and stabilization in the Belgian federation. Working Document Steunpunt Fiscaliteit en Begroting, CES, K.U.Leuven.

[32] PIT grants provide no relative smoothing. VAT grants are stabilizing as they are independent from regional economic performance. As in other federations, the driving force for equalization in Belgium is equity, not stabilization.

[33] Following Verdonck (2009) the greater part of the changes in regional tax rules over the period 2002-2008 could be motivated on the basis of a better adjustment of taxes to local conditions and preferences (innovations were mostly initiated by Flanders and followed by the other two Regions).

- *Negative (horizontal) externalities* due to mobility of the tax base should be limited. Mobility, however, is not limited to interregional mobility within Belgium, but has to be seen within the broader context of tax competition with regions in neighbouring countries. Potential negative external effects in Belgium have to be weighted against potential positive effects of broadening the tax base vis à vis other countries. Negative interregional tax externalities can also be reduced by maintaining a common tax base at the (federal) level. Moreover, incentives for tax competition are also reduced, as disparities are compensated by equalization grants. Hence, the strict limits on fiscal autonomy in the present SFA are not (necessarily) justified by negative externalities.
- Finally, for *interregional redistributive concerns* the requirement of maintaining federal progressivity in personal income taxes, as is the case under the present SFA, is rather ambiguous. It appears that the interregional redistribution effects of interpersonal solidarity hinge almost entirely upon financial flows through the social security system, the contribution of (progressive) income taxation being minimal.[34] Hence, from this point of view the strict maintenance of federal progressivity for regional taxes on personal income can be questioned.

Third, better incentive compatible solidarity mechanisms among the regions should be designed at the horizontal level. A new horizontal equalization scheme among the Regions is preferred to the current vertical arrangement between the federal government and the Regions because of the following reasons:

- First, the vertical equalization scheme together with the current financing system based on grants leads, as explained before, to a "development trap" for the Regions which are recipients of this solidarity mechanism.
- Second, it is a more transparent expression of loyalty between regions in a federation.
- Third, it puts an end to the increasing solidarity grants that come from the federal budget since 2000, creating room to meet the rising costs of an ageing population.
- Fourth, it eliminates the rather complicated and strange mechanism, whereby economically weaker regions first contribute to the federal budget, and receive extra money afterwards.
- Finally, as we mentioned earlier, a horizontal solidarity system is better suited to internalize horizontal tax externalities, in comparison to a vertical arrangement.

3. Proposal for an Improved SFA

3.1 *Guiding principles*

In order to strengthen the necessary fiscal autonomy and financial accountability of the Regions and the Communities, we propose to replace the current, mainly grant-oriented system of financing arrangements laid down in the Special Finance Act as follows:

1. *The federal grants to the Regions are replaced by an own regional personal income tax (PIT).*[35] The regional PIT should preferably take the form of an additional percentage tariff, applied to the federally defined tax base (possibly within pre-agreed limits to restrict extreme tax competition).
2. *The federal VAT-grant remains the main source of income for the Communities.* But the total grant will be determined as a *fixed* percentage of the federal VAT revenues, which means that it becomes a true shared tax. The horizontal attribution between the Communities will remain unchanged. The horizontal assignment on the basis of

[34] Van Hecke, A. 2009. Revenue equalization and stabilization in the Belgian federation. Working Document Steunpunt Fiscaliteit en Begroting, CES, K.U.Leuven.
[35] This could possibly be extended with a partial regionalization of the corporate income tax, as is the case in other federal states.

school-aged children (between 6 and 17 years) assures a first built-in solidarity mechanism.

3. *The other federal grants to the Communities are substituted by a PIT levied by the Regions, who will transfer the proceeds to the respective Communities.* In the Brussels Capital Region (BCR) the proceeds of this personal income tax are shared between the French-speaking and the Flemish Community on the basis of the current 80/20 division key.
4. *A horizontal, transparent and reversible equalization mechanism, comparable to the German 'Finanzausgleich', is put in place.* This mechanism guarantees to each Region up to 95% of the average per capita PIT-revenues in Belgium. As a consequence, Regions with higher per capita PIT will transfer revenues to the lower per capita PIT Regions. Contrary to the existing SFA arrangements, this solidarity mechanism between the Regions takes into account the PIT revenues which the Regions will transfer to the Communities. In this way, the solidarity mechanism is enlarged because it also applies between the Communities.
5. *The Brussels Capital Region is further entitled to a special compensation for the burden linked to its particular function as capital of Belgium.*
6. *Nothing will be changed, of course, to the current own regional taxes.*
7. *At the start of the system each Region and Community is guaranteed at least the financial resources it is entitled to under the current SFA.*

The new financing system constitutes an improvement with respect to numerous aspects.

- First, the burden and responsibility for the solidarity grants is transferred from the federal government to a mutual responsibility of the Regions.
- Second, it devolves a substantial amount of fiscal autonomy and financial responsibility to the R&C.
- Third, it assures an enhanced simplicity and transparency in comparison with the current SFA.
- Fourth, the system ensures a clear risk- and advantage-sharing of cyclical and structural changes in PIT and VAT revenues by the federal and regional governments.
- Fifth, the solidarity mechanism now also applies to the revenues of the Communities.
- Finally, and perhaps most importantly, the new system offers a much sharper and clearer incentive mechanism for the stimulation of economic growth and employment. An increase of the regional tax base will directly favour the region through extra revenues (whereas the current SFA penalizes an improved economic performance). This "incentivation" of regional governments will also have beneficial effects on the budget challenge of the federal government, especially in the light of the extra costs linked to an ageing population.

3.2 *How to reform the current SFA?*

In order to demonstrate the aforementioned guiding principles for a more orthodox New Special Financing Arrangement (NSFA), we make a comparison with the outcome under the current SFA. *Table 3* summarizes the financial resources available under the SFA for the R&C on the basis of data for 2005.

Under the proposed NSFA, the own regional taxes and the federal VAT grants to the Communities remain unchanged. But the federal grants to the Communities other than the VAT grants, the federal grants to the Regions, and the federal solidarity grants are replaced by an own regional PIT that is (preferably) levied as an additional percentage on the federal PIT. In total about 14.8 billion euro of federal grants to the R&C thus become revenue from a regional PIT together with a horizontal equalization mechanism. This represents 47.72 % (about half) of total federal PIT and 11.77 % of the total PIT base in 2005. Based on these percentages we simulate the outcome of the proposed NSFA.

Important to notice is that the definition of the PIT base and the progressivity of the tax rates –and thus the interpersonal redistributive character of the PIT– remain unchanged and within the competence of the federal government in this proposal.

Table 3: Financing of R&C, 2005 (in 1000€): according to the SFA

	Flanders (including Flem. Comm.)	**Wallonia (including French Comm.)**	**BCR**	**Total**
1. Own regional taxes	3,424,053	1,521,816	895,896	5,841,765
2. Federal VAT grant to the Communities	6,512,815	4,867,593		11,380,408
3. Federal grants to the Communities other than VAT[36]	3,767,751	2,067,310		5,835,061
4. Federal grants to the Regions[37]	5,068,923	2,412,045	555,767	8,036,735
5. Federal solidarity grant	0	754,199	169,212	923,411
6. Total	18,773,542	11,622,963	1,620,875	32,017,380
7. Total without VAT grants and own regional taxes	***8,836,674***	***5,233,554***	***724,979***	***14,795,207***
Grants without VAT grant as % of PIT revenues	44.65%	54.97%	46.54%	47.72%
Grants without VAT grant as % of the tax base of the PIT	11.23%	12.70%	12.41%	***11.77%***

Source: VIVES Beleidspaper 1[38]

3.3 *Financing of the R&C under the NSFA*

The outcome of the NSFA-simulation is shown in *Table 4*. In comparison with the current SFA Flanders (including the Flemish Community) would gain 140.2 mio euro, the BCR 92.4 mio euro and Wallonia (including the French-speaking Community) would loose 232.6 mio euro. According to guiding principle 7, the latter amount is to be compensated by the other two regions in other to leave the starting situation unchanged for all parties involved.

The purpose of the proposed NSFA is to enhance the responsibility of the respective levels of government for their own tax revenues, and thus providing better incentives for good governance and political accountability. Activity enhancing policies are crucial at all levels of government, but especially to stimulate the catching-up of weaker economic regions with the rest of the country. Solidarity and equalization grants are necessary, but of even more

[36] These grants comprise the PIT-grant, the allocation for foreign students and radio and television license fees.
[37] These grants include the PIT-grant and grants for unemployment relief works.
[38] Algoed, K., Heremans, D. en Peeters,T. Oktober 2008. Een Staatshervorming als Reddingsboei voor de Overheidsfinanciën, Vives Beleidspaper 1.

importance is a successful policy of higher employment levels and economic growth. Taking incentives for enhanced regional performances into account, we take a look at where this could bring us by considering a 'convergence scenario'. Given the significant disparities in the regional employment rates[39] we notice that there is plenty of room for activation of the labour market which could trigger interregional convergence. In our reference year 2005, the Flemish employment rate of 65% is substantially higher than the employment rates of Wallonia (55.9%) and Brussels (49.2%).[40] Moreover, when comparing those figures to 93 EU27-regions, we see that even Flanders ranks only among the average performers, while Brussels and Wallonia are part of the worst performing cluster of 12 regions.[41]

For the simulation of our convergence scenario, we look at a convergence of activity rates[42], which make a correction for commuting between regions. In practice, we look at the influence on the tax base of a convergence of the activity levels of Wallonia and Brussels to the activity level of Flanders[43], and we simulate what would have been the funding of the R&C under the NSFA. The results are presented in the second part of *Table 4*.

Table 4: Financing of R&C, 2005 (in 1000€): according to NSFA[44]

	Flanders (including Flemish Comm.)	Wallonia (including French Comm.)	BCR
	Current SFA		
Federal grants (excl.VAT)	8,836,674	4,479,355	555,767
Solidarity transfer	0	754,199	169,212
Total	***8,836,674***	***5,233,554***	***724,979***
	NSFA		
Revenues from PIT	9,180,978	4,460,260	1,153,969
Solidarity transfer	-313,130	104,790	208,340
Community transfers from BCR	108,985	435,939	-544,923
Total	***8,976,833***	***5,000,989***	***817,385***
	NSFA Convergence scenario		
Revenues from PIT	9,180,978	4,879,490	1,416,054
Solidarity transfers	-8,989	0	8,989
Community transfers from BCR	114,003	456,014	-570,017
Total	9,285,992	5,335,504	855,026

Source: VIVES Beleidspaper 1

In practice, we start from the working age population in every region. Next, we assume that Brussels and Wallonia reach the Flemish ratio of active versus inactive population. This will increase employment in Brussels and Wallonia by respectively 124,442 and 224,096

[39] The employment rate is defined as the ratio of working people that live in a particular region to the number of people of working age in that region.
[40] Data from www.steunpuntwse.be.
[41] Vives Beleidspaper 1 and Stevens, E., De Winne, S. &Sels, L. 2007. Europa regionaal. Arbeidsmarktprestaties in een comparatief perspectief, Steunpunt WSE rapport 2007.
[42] The activity rate is defined as the ratio of the number of people who work in a particular region over the people of working age in that region.
[43] The tax base of a region depends, among other things, on the ratio between the active and inactive part of the population. This ratio is partly driven by demographic factors (the number of pensioners, the size of the population of working age, …), but also by the labour market performance (employed versus unemployed, public or private employment, structural or cyclical unemployment…).
[44] In the following calculations, only PIT revenues are considered (VAT grants and regional taxes are not included). Calculations are based on a regional tariff of 11.77% in the personal income tax, an equalization to 95% of the national average and settlement for Community means in Brussels.

people.[45] An enlarged working population is reflected in an increased tax base and higher own regional PIT revenues as shown in*Table 4*.[46]

Two important conclusions result from this simulation.

- First, solidarity transfers almost disappear. Only a small equalization grant from Flanders to BCR of about 9 mio euro remains. The often claimed need for solidarity between 'rich' and 'poor' appears to be rather a solidarity between a more active population in one part of the country and a more inactive population elsewhere. It makes an activity-enhancing fiscal system for the Regions all the more compelling.

- Second, all Regions improve their financing base. Flanders (including the Flemish Community) by 5.1% because of much lower equalization transfers. Wallonia (including the French-speaking Community) by 1.9% and BCR even by 17.9% because of higher own PIT revenues, notwithstanding lower solidarity transfers.

The importance of a solidarity mechanism that reduces disparities in fiscal capacity is illustrated in *Table* 5. The interregional disparities in average per capita tax base are substantial. However, the convergence scenario reduces them significantly.

Table 5: Average tax base[47] per capita in € (convergence scenario)

Average tax base per capita (in €): incomes 2005			
Belgium	**Flanders**	**Wallonia**	**BCR**
11962.87	12836.88	11103.85	9626.70
Deviation from the national average	+7.31%	-7.18%	-19.53%
Average tax base per capita (in €): Convergence scenario			
Belgium	**Flanders**	**Wallonia**	**BCR**
12513.75	12836.88	12147.52	11813.08
Deviation from the national average	+2.58%	-2.93%	-5.60%

Source: VIVES Beleidspaper 1

Most importantly, the budgetary situation of the federal government and the social security system would also improve substantially. Under the considered convergence scenario, total regional PIT revenues increase by 681.3 million euro. The federal government tax revenue increases by a similar amount. The income tax base of the active population goes up by 6.4 billion euro, whereas that of the unemployed population decreases with 604.7 million euro (which results in a net increase in the income tax base of 5.8 billion euro).[48]

3.4 *Effect on per capita budgets of Regions and Communities*

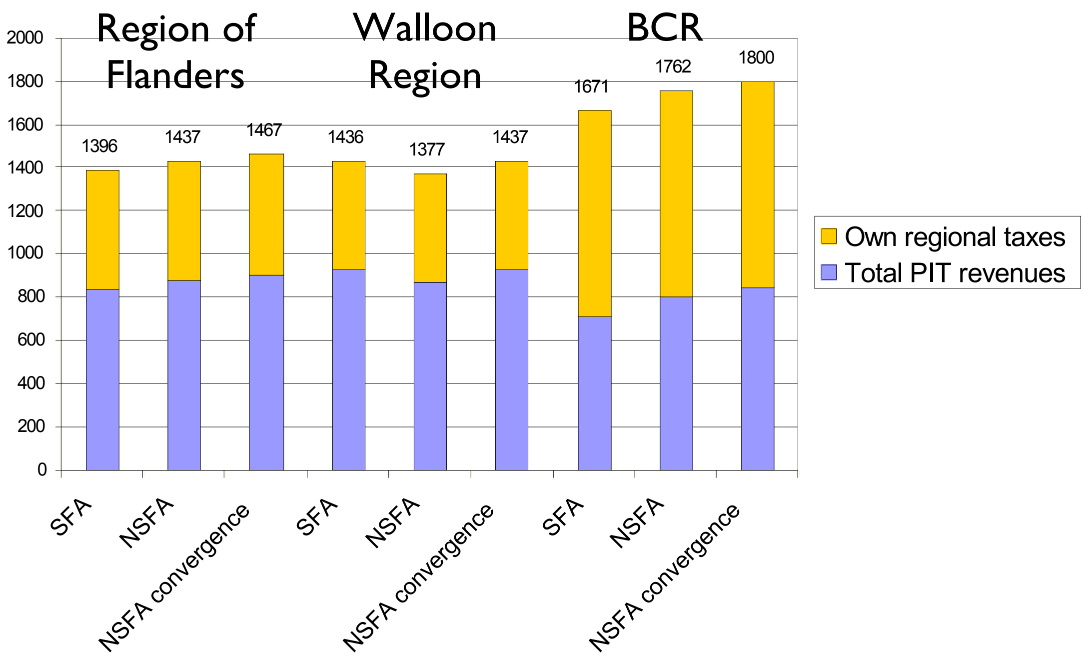
We now look at the effect of the two scenarios on the financial means of the Regions and the Communities separately. Figures 2 and 3 allow a comparison of per capita means. The budgetary means of the Communities in

[45] This would be a large step in the direction of the objective of 500,000 extra people at work proposed by representative employers organizations some time ago.
[46] We suppose that the extra employed people in Brussels and Wallonia earn the current average regional income.
[47] Remark that these regional tax bases already include the interpersonal solidarity through the social security system.
[48] The social security contributions will, of course, also benefit from the convergence scenario. A rough estimate puts these benefits at 1.1 billion euro for Wallonia and 207.4 million euro for Brussels.

Figure 3 are the sum of the share of each Community in the VAT revenue and the transfer of 40% of the regional PIT. For BCR, this latter amount is split according to the 80/20 key. For Wallonia, we use a transfer of 35% instead of 40% of the regional PIT to the French-speaking Community, in order to create a win-win-situation for every entity. The VAT revenue is shared between the Flemish and the French-speaking Community on the basis of the relative share of school-aged children between 6 and 17 years.

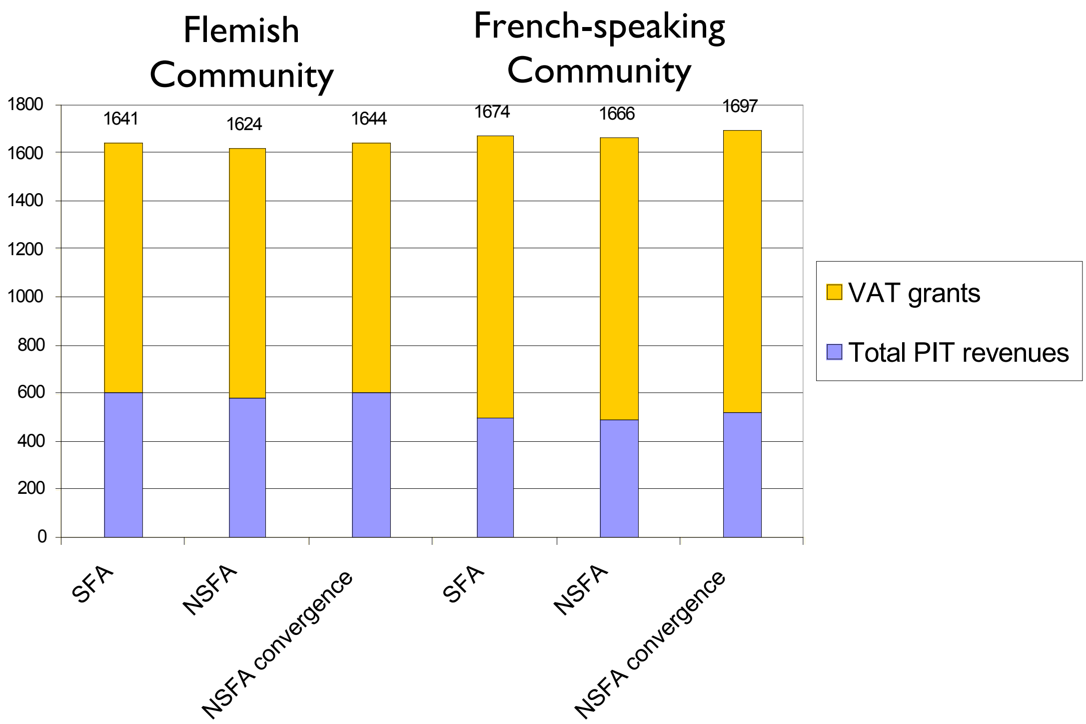
Under the current, mainly grant-based SFA BCR receives only 715.8 euro per capita compared to 836.3 euro for Flanders and 929.9 euro for Wallonia. But BCR more than compensates this with significantly higher own regional tax revenues on a per capita basis than Flanders and Wallonia (but these higher own regional taxes are not taken into account in the calculations of the equalization scheme). Moreover, it is clear that especially BCR benefits from our alternative scenarios.

Figure 2: Funding of the Regions: budgetary means in € per capita in 2005



Source: VIVES Beleidspaper 1+own calculations

Figure 3: Funding of Communities: budgetary mean s in € per capita in 2005



Source: VIVES Beleidspaper 1+own calculations

3.5 *Extra compensation for Brussels for the burden as federal capital?*[49]

So far we have not included any extra grant to BCR to compensate for its burden as federal capital. This is mainly a political matter and in this respect there are no simple rules to apply. An argument often put forward to give extra financial resources to BCR refers to the share of BCR in the national GDP: 20%, compared to a population share of 10%. To the extent that this is a valid argument, it should be dealt with through a regional production tax[50] alongside the regional PIT and the regionalized share of the (VAT) expenditure tax. A regional PIT transfer from Flanders and Wallonia (or from the federal budget), based on the number of commuters that earn their income in BCR but pay taxes in their region of residence, is not the right answer to this issue.

Compensating BCR for the high net labour inflow would in principle require double taxation agreements with Flanders and Wallonia (as is the international practice), in order to avoid double (income) taxation.

Arguing that BCR should be compensated for the congestion costs caused by the large net labour inflow is a more sensible argument. But simple compensation for these negative externalities through extra federal grants does not stimulate BCR to directly address these congestion problems. Such a subsidization of the BCR congestion costs will have a perverted effect. It would give the BCR government a permanent incentive to increase the net labour inflow at the expense of work for its own citizens, especially under the current SFA. The subsidy will rather create more congestion and thus more costs. A more efficient solution is to discourage congestion (and the net labour inflow) and thus tax the commuting phenomenon itself. This would at the same time provide an extra incentive to put more people living in BCR at work.

As mentioned under the guiding principles, we do not exclude extra financial resources for the burden of BCR as the Belgian and European capital. But the arguments put forward so far by the supporters of extra financial compensations are less convincing than they would like them to be. Moreover, more money for BCR can hardly be dissociated from an in-depth discussion about the efficiency and the overall structure of the BCR governing bodies.

4. *Final comments*

It should be kept in mind that the previous conceptual exercise is limited to a kind of comparative static framework for 2005, mainly based on tax data. Compared to the current SFA, a new NFSA is devised in order to give the proper incentives for activity enhancing policies. Only the additional employment effects are simulated under the benchmark case of a convergence scenario, which allows to compare these effects on the financing of the R&C to a NSFA without convergence and to the current SFA. No time path is set forward, and productivity growth and inflation, necessary to reflect the true numbers of funding of the R&C in the future, are not taken into account. Such an exercise requires a more encompassing model making predictions for the future. Within the context of the wider Vladymo model[51], taking also demographic evolutions, regional GDP growth and inflation into account, a similar convergence scenario for employment is in the process of being simulated. The first results confirm the win-win outcomes for the R&C, but even more importantly for federal finances and social security.[52] Remark that, besides considering a convergence scenario of Wallonia and Brussels catching up with Flanders, in a European

[49] See also Algoed, K. April 2009. De onderfinanciering van Brussel: een mythe? Vives Beleidspaper 7. April 2009.

[50] This could be an argument for regionalization of the corporate tax.

[51] Vlaams Dynamisch Model van de Overheidsfinanciën.

[52] For the Vladymo model, see a recent study by Algoed, K., Heremans, D., and Van Hecke, A. Maart 2009. De impact van de vergrijzing op de overheidsfinanciën: eindrapport. Steunpunt Fiscaliteit en Begroting.

context there is still room for improvement in Flanders too. Taking enhanced Flemish performances into account would even strengthen the win-win-situation.

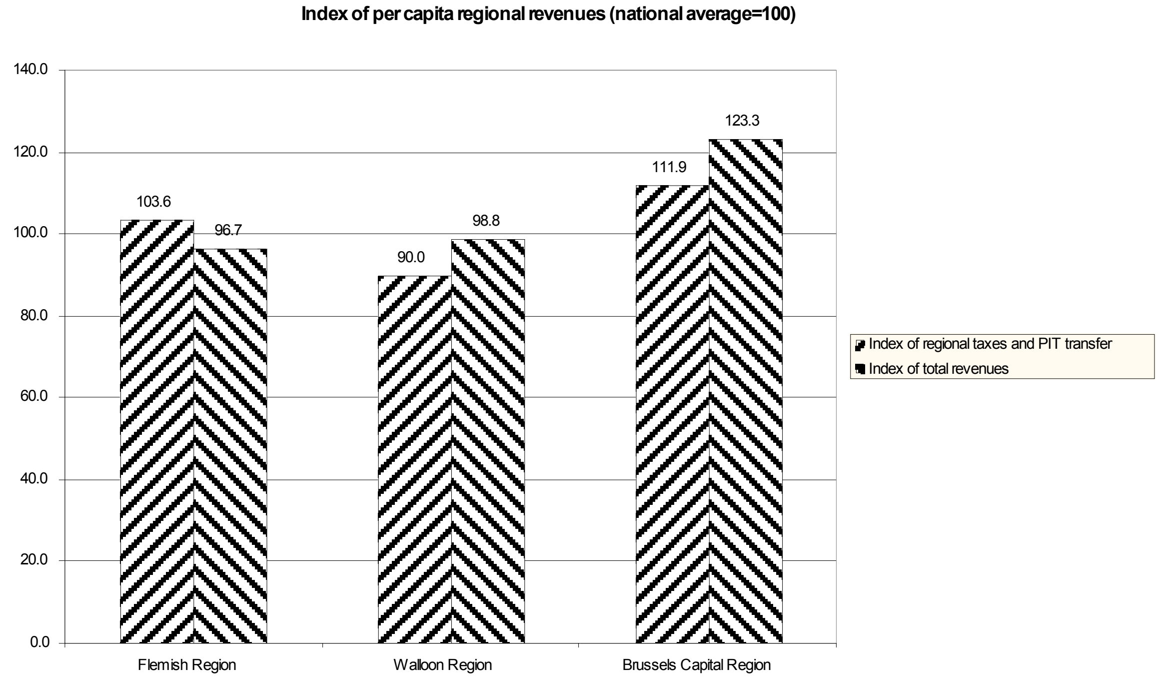
The implementation of the NSFA has a negative impact at the start for the funding of some federated entities, when compared to the current SFA. Indeed, the beneficial effects will only become visible by creating employment along the path towards convergence. In particular the consolidated entity Wallonia-French-speaking Community should be compensated at the start according to guiding principle 7 (see *Figure* 6 in Appendix). Hence, a *transition scenario* that, however, maintains the necessary incentive effects should be developed: e.g. on top of the necessary compensation at the start of the NSFA they already could be granted gradually by anticipating some of the benefits they are entitled to in the PIT as they proceed in creating additional employment. As for the entities that gain at the start, i.e. BCR and Flanders, they could only gradually be granted these additional means.

Finally, the transition towards convergence could eventually be further activated by providing in the transition phase specific incentives for employment as they can be derived from several recent proposals for regional labour market policies (RLP).[53] Such proposals may be useful to stimulate economic activity and reduce unemployment. However, as the financing relies mostly on federal grants, they increase the fiscal gap and reduce fiscal responsibility. This is to be avoided by combining the RLP programs with the new financing system (NSFA), allowing to gradually replace (part of) the grants by personal income tax (PIT) as convergence proceeds. Hence, the RLP programs would not evolve into an additional grant system becoming permanent, but would be replaced in the process and sustained by additional PIT income. The elaboration of such scenarios and their assessment await further simulations within a more comprehensive model (Vladymo).

[53] For RLP, see Dewatripont, M., Struyven, D. 2009 Garantir une "solidarité responsable et durable" en Belgique en améliorant les incitations à la création d'emplois par les entités fédérées? In: *Quel état pour quelles performances économiques?* Proceedings of 18e congrès des économistes Belges de langue française, and Van Rompuy, P. 2009. Regional labour market policies: scope and limits in a federal state. In: Re-Bel e-book 2.

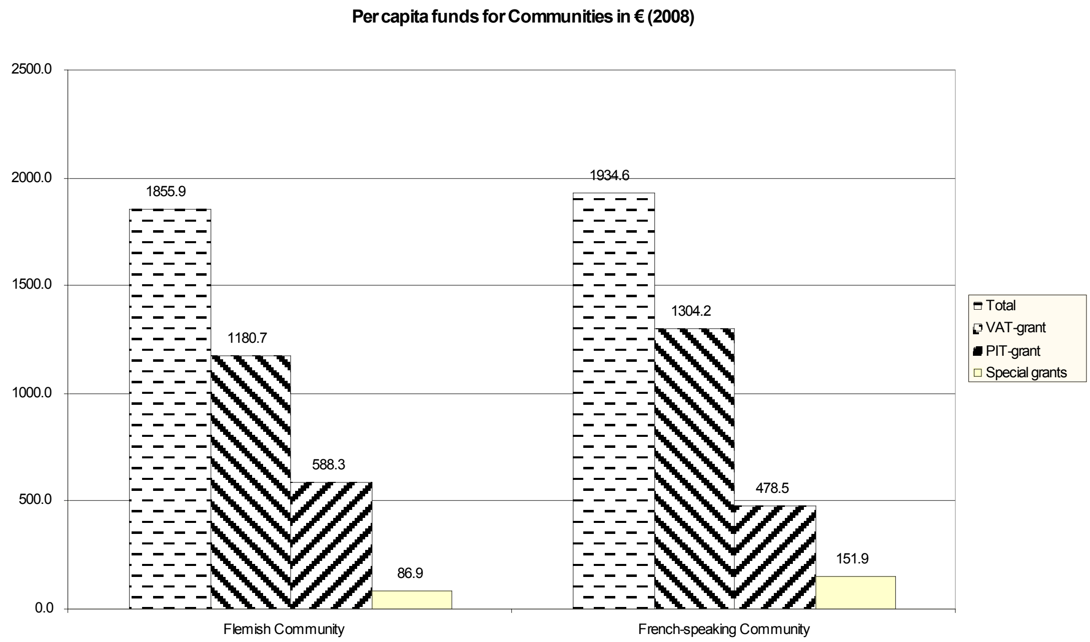
APPENDIX

Figure 4: Index of per capita regional revenues (national average = 100) (2008)



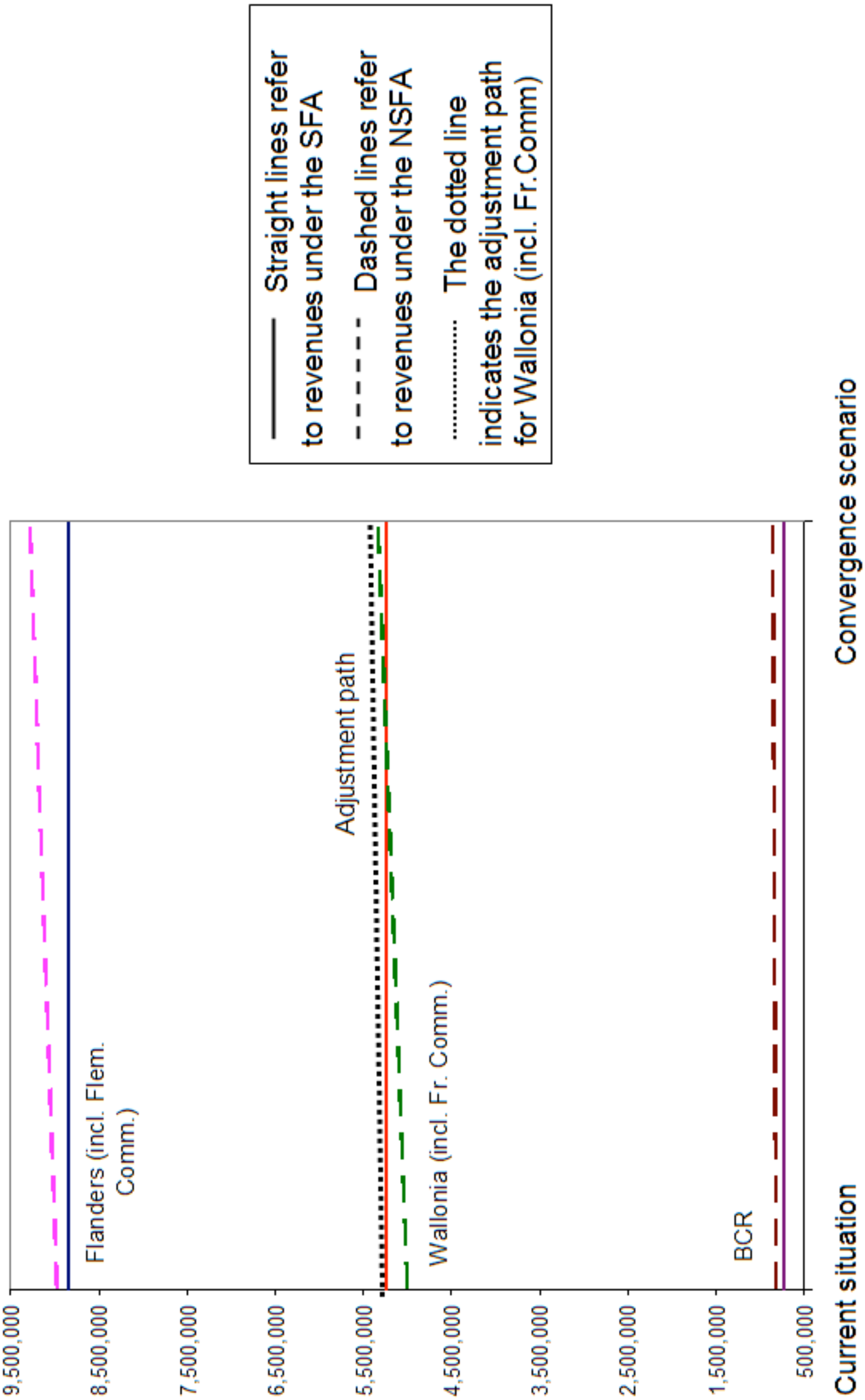
Source: Own calculations

Figure 5: Per capita funds for Communities in € (2008)



Source: Own calculations

Figure 6: Budgetary means of R&C under the SFA and the NSFA in 2005 (in 1000€)



Comment

Toward more responsible Regions?

André Decoster (KULeuven) & Philippe Van Parijs (UCLouvain)

There will be no major reform of the Belgian federal state without some significant changes in the way in which its federated entities are funded. And no such change will happen if it cannot be sold as a win-win-win reform, as a reform from which, albeit with some time lag, all three of our Regions can reasonably expect to benefit. Hence the importance of intelligent and thorough contributions such as the two lead pieces of the present Re-Bel e-book. Both aim to improve on the existing setup by increasing transparency, accountability and the financial incentive structure faced by regional governments, while protecting both intra- and inter-regional solidarity. This is the sort of proposal we need to get a serious debate off the ground. It is to this debate that we wish to contribute, by raising a number of questions on some of the central issues.[54]

1. "Political economy": what regional governments are meant to be driven by

First of all, let us express our agreement with the authors of both lead pieces that there is much to be said for making governments — whether at a national or regional level — bear responsibility for the economic consequences of the policies that lie within their competences. Admittedly, we should not to be misled by too close an analogy with individual decisions. It is arguably not only efficient but also fair to make adult human beings bear responsibility for the economic consequences of the choices they deliberately make. As regards public policies, the ethical case is much weaker. To put it mildly, it is not self-evidently fair to make the population of a whole country or region suffer or benefit from the consequences of policies adopted by its current government, let alone by its past governments, irrespective of whether those suffering or benefiting supported those governments and played any part in electing and re-electing them. Whether fair or not, however, making a country or a region bear, albeit it in part, the economic consequences of the quality of its decisions is definitely efficient. Full neutralization of these consequences through compensatory transfers from the virtuous to the defective would create damaging moral hazard from which everyone would suffer in the long run. Keeping this moral hazard in check does not require that there should be no transfer from affluent regions to less prosperous ones — the prosperity of a region is strongly affected by exogenous factors beyond any government's control —, but it does require that bringing about greater regional prosperity should be in the regional governments' financial interest. According to the authors of both lead pieces, this is not sufficiently the case in the complex set up currently in place.

More specifically, Heremans & al. sensibly insist that politicians cannot be assumed to be benevolent policy-makers and that they can be expected to respond to incentives. They thereby invite us to move beyond the "first generation" normative approach to fiscal federalism associated with Kenneth Arrow, Richard Musgrave and Paul Samuelson and to supplement it with insights from the so-called political economy approach associated with "second generation" theories.[55] To start with, it can safely be assumed that one major incentive, for any politician in power, stems from the wish to be re-elected. In any context in which transfers from other federated entities do not fully compensate the population's income losses, whether a federated entity is doing well or badly in economic terms can be assumed to affect, and be believed by politicians to affect, the probability of re-election. The existing trans-regional redistribution — which operates mainly through the federal social

[54] Partly in the light of our earlier thinking on these matters. See Roland, Vandevelde & Van Parijs (1996), Van Parijs (2005, 2009), Decoster & Verwerft (2009).
[55] See Bouton & Verardi (2010) for a more precise characterization of the distinction.

security system and only to a limited extent through the federal funding of regional budgets[56] — is of course very far from providing full compensation. The governments of all three regions therefore do have some incentive to use whatever competences they have to improve the prosperity of their region. But not enough, according to both lead pieces.

Particularly worrying is that, under some circumstances, the current setup implies that greater prosperity for a region translates into smaller revenues for its government. Viewing this as a perverse incentive structure need not be interpreted cynically as attributing to politicians in power a desire to pocket some of these revenues for personal gain. More charitably (and hopefully more plausibly), it can be interpreted as ascribing to them a desire to increase the scope for expenditures that will (be seen to) benefit their electorate and thereby enhance the probability of their re-election. Under the complicated current financing system that grew out of an insufficiently coordinated sequence of compromises, a decrease in the economic prosperity of one region, as reflected in the volume of income tax collected in its territory, can lead to an increase in the revenues of its government. The simpler and more transparent systems proposed by both lead pieces get rid of this anomaly, commonly referred to as a "dependency trap".

This is all fine. But one should beware of making too much of the alleged "incentive effects" of (re)establishing a monotonically positive relationship between a region's prosperity and its revenues. Deschamps & al. (§2) mention that the "dependency trap" has been "well documented", and Heremans & al. (§ 2.2.3) that the "adverse incentive effects" have been "widely documented". But as far as we can see, the studies to which they refer go no further than an arithmetic exercise that consists in displaying the perverse structure of budgetary constraints faced by the regional governments. As important as such constraints may be in trying to explain behaviour, they certainly are only part of the story. Neither of the pieces provides any evidence showing that regional policies — in particular those of the Walloon government — would have been noticeably more favourable to regional economic prosperity if the latter had affected the region's revenues in a more straightforward way.

On the contrary, there are several grounds for doubting that this is the case. Firstly, as noted by Deschamps & al. (footnote 5), the dependency effect vanishes when the revenues of regions and communities are consolidated. Secondly, regional governments must realize that the region's level of prosperity should have some positive effect on its ability to raise revenues through regional taxes of a different sort. And thirdly, as mentioned earlier, the region's perceived prosperity itself should have a significant direct effect on re-election: expecting worse prospects for jobs and wages to be compensated in the electorate's eyes by slightly higher public expenditure looks like a risky bet for the governing parties to make. Even a small effect would therefore be surprising, not to mention an effect of such a magnitude that it would produce the spectacular convergence postulated in Heremans & al's scenario (§ 3.3). Removing the anomaly through a simpler and more transparent system, as proposed in both lead pieces, would be welcome. But neither piece gives any ground for expecting it to have a significant impact on regional growth, let alone on inter-regional convergence. [57]

[56] To get a sense of perspective, it is useful to bear in mind that he solidarity component in the Special Finance Law — the object of the present discussion — amounts to slightly more than 1 billion euros in 2009 (see Algoed and Van Den Bossche, 2009), while interregional transfers generated by interpersonal redistribution through social security (benefits and contributions) and personal income taxes are estimated to be between 5 and 6 billion euros (Table 1 in Denil 2010).

[57] Challenging papers by Algoed and Persyn (2009) and Persyn (2010) do go beyond sheer arithmetic by providing an econometric analysis of the relationship between inter-regional redistribution and regional growth in the European Union. However, in so far as they succeed in establishing a relevant impact at all, it is the impact that would be produced by a massive shrinking of the whole redistributive system (including social security), coupled with a decentralization of wage formation, and not the comparatively insignificant strengthening of the link between regional revenues and the income tax base. Moreover, the structural model conjectured to underlie the econometric results has to do with factor mobility across small adjacent "regions" — for example between wealthy Brabant wallon and poor Hainaut,—, not with the "political economy" of regional decision making — for example by the Flemish or the Walloon government.

2. *Political cosmetics: what "transparent" transfers are meant to display*

Getting rid of the perverse incentives associated with the dependency trap is only one implication of organizing the funding of our federated entities in a simpler, more rational way, as proposed in both lead pieces. Both propose a transparent combination of responsibility and solidarity. Responsibility is achieved through a tangible positive relationship between the tax base in the region and the regional government's revenues. Solidarity is to a large extent achieved in the background, through the federal funding of social security transfers and education, but also directly through subsidies to the budgets of the regions with more modest per capita tax bases. However, the two proposals differ from each other in the way in which this combination of responsibility and solidarity is structured. And they both differ from a third, equally simple way, in which the funding of the regions could articulate responsibility and solidarity — and for which we believe a strong case can be made.

In all three formulas, the federal government collects income taxes in all three regions, using a progressive tax schedule determined at the federal level, but the next step takes three distinct forms:

(1) The regions' share of the federal income tax is distributed to the regional governments in proportion to the taxes raised in the region, but the region(s) with an above-average per capita tax base transfer funds to the region(s) with a below-average per capita tax base, according to a fixed formula that compensates partly the difference (Heremans & al.'s horizontal equalization formula).

(2) The regions' share of the federal income tax is distributed to the regional governments in proportion to the taxes raised in the region, but the federal state transfers additional funds to the region(s) with a below-average per capita tax base, according to a fixed formula that compensates partly the difference (Deschamps & al.'s vertical equalization formula).

(3) Part of the federal income tax is distributed to the regional governments in proportion to the population living in the region, while another part (the rate of which may vary from region to region) is distributed to the regions in which it was raised. (Formula analogous to the *opcentiemen/ centimes additionnels* on the federal tax that partly fund the municipalities.)

Under all three formulas, some degree of "responsibility" is achieved: the revenues of each region will grow monotonically with the income tax base of the region. Under all three formulas, some degree of "solidarity" is achieved: richer regions will contribute to funding the public expenditures of poorer ones. How much "responsibility" and how much "solidarity" is achieved is in no way determined by the formula, but by the specific parameters chosen.[58] The incentive argument, therefore, could not possibly discriminate between the three formulas. What other considerations could guide the choice?

To justify their preference for (2) over (1), Deschamps & al. (§3.1 step 2) mention that vertical equalization serves "to ensure that institutional solidarity remain the responsibility of the federal level and be stable over time". But the necessity of such a link is questionable.

[58] Deschamps & al.'s (§ 4.2) vertical equalization mechanism transfers to Regions with a per capita personal income tax (PIT) base below the federal average 85% of the revenues they failed to collect as a consequence of falling short of the average. Heremans & al.'s (§ 3.1) horizontal equalization mechanism guarantees to each Region 95% of Belgium's per capita PIT revenues. In the event of small divergences between Regions, the former proposal implies more "solidarity" and less "responsibility" than the latter. In the event of large divergences, the opposite is the case. Both proposals can easily be amended to incorporate more "solidarity" or more "responsibility": by increasing or decreasing the rate of vertical compensation in the former proposal, by increasing or decreasing the threshold that triggers horizontal transfers in the latter. In the third proposal, the degree of solidarity is simply expressed in the percentage of the federal PIT allocated to the Regions on a per capita basis (possibly modulated by some simple coefficient reflecting objective needs). This percentage can be determined so that the PIT revenues per capita allocated to all Regions match those accruing (after equalization) to the poorest Region under either of the other two proposals. It can be increased or decreased in order to reflect more "solidarity" or more "responsibility", respectively.

Indeed, in Heremans & al's horizontal equalization proposal, transfers are of course not left at the regions' discretion, but fixed by a formula determined at the federal level.

To justify their own preference for (1) over (2), Heremans & al. argue that horizontal equalization is "better suited to internalize fiscal externalities", more specifically that it would "reduce the incentives to lower tax rates in order to attract mobile tax bases" (§§ 2.1.2, 2.2.4).[59] However, this argument seems hardly more convincing. Firstly, under horizontal equalization, when deciding to lower tax rates in order to attract taxpayers, the anticipation of higher transfers to the region whose tax base one is hoping to "plunder" will generally weigh little compared to the loss of revenues from taxes on the region's pre-existing tax base. Secondly, under vertical equalization, a regional government cannot be totally blind to the fact that plundering another region's tax base will mean, for its population, a proportionally higher share in a higher absolute volume of federal transfers to the region being plundered. And thirdly, the vertical equalization formula could be so structured that it operates with a closed envelope: if federal compensation to one below-average region needs to increase, the federal distribution of income tax to the other regions automatically decreases.

If this is right, arguments in terms of incentives, externalities, efficiency, etc. are not decisive either way, essentially because any combination of regional responsibility and inter-regional solidarity can be achieved by both vertical and horizontal equalization, and indeed by the third formula too. The real reason for preferring one or the other formula may therefore rather lie at another level, which might be labelled "political cosmetics". Thus, in their plea for horizontal equalization, Heremans & al. (§ 2.2.4) offer an altogether distinct argument, which has nothing to do with the incentive structure. They argue that "it is a more transparent expression of loyalty between regions in a federation" and, relatedly, that "it eliminates the rather complicated and strange mechanism, whereby economically weaker regions first contribute to the federal budget, and receive extra money afterwards".

To appreciate what is involved in this reasoning, it may be revealing to transpose it to redistribution across municipalities. The federal or regional government could first distribute the whole of the communes' share in the income tax it collects to the authorities of the communes in which the tax originates, and then require those with an above-average tax base to transfer revenues to those with a below-average tax base, using some fixed algorithm. Would we welcome this as a "more transparent expression of loyalty between the *communes*", or as "eliminating the rather complicated and strange mechanism, whereby economically weaker *communes* first contribute to the federal budget, and receive extra money afterwards"? Is it not, instead, both simpler and more transparent to let the federal (or regional) government collect resources from taxpayers all over the territory and then allocate them to local authorities in proportion to their population (and possibly some characteristics reflecting the needs of that population) so that they can provide adequate services to all citizens? What would be the point of returning first to Brasschaat, Waterloo or Uccle the revenues collected there? Just to make the people living there feel superior, or generous? Or to make the people in Beringen, La Louvière or Molenbeek feel humbled, or grateful? Or to encourage a political rhetoric in terms of "us (here, rich) and them (there, poor)"? This would seem rather petty. Is there any better reason for proceeding in this "complicated and strange" way at the level of regions than at the level of communes, apart from it being less cumbersome with 3 regions than with 583 municipalities?

If not, the third formula sketched above seems the best one of the three. It is simple and transparent. And it is just as capable as the other two of achieving whatever balance between responsibility and solidarity is deemed to be desirable.

[59] Footnote 10 refers to Verdonck (2009), who spells this out as follows: " In a vertical solidarity system, the first move of the richer region towards a lower tax rate, which attracts part of the tax base from other regions, would not be punished by increased solidarity payments from that region to the other regions.

3. *The Brussels headache: why economists would love to redraw boundaries*

Both lead pieces sometimes speak of "federated entities", so as to cover both regions and communities. But most of the time, they speak of regions. Wisely so. If we want to make federated entities more responsible by making their revenues more sensitive to the taxes collected, we must be talking of territorially defined entities, endowed with a power to tax. We must also be talking about entities with competences that are comprehensive enough to affect significantly the tax base in the territory under their authority. This is clearly the case for the Flemish region, where a single government has exercised from the start both the "territory-related" regional competences and the "person-related" community competences. This has also become nearly the case for Wallonia since March 2008, when the governments of the Walloon Region and the French Community were united under a single minister-president. But it is clearly not the case for the Region of Brussels-Capital. If anything should be expected to have a major impact on the tax base of a region, it is no doubt the formation of its human capital. But 20% of education in the Brussels Region is under the authority of the Flemish government, and the remaining 80% is under the authority of two Walloon ministers in a government headed by the president of the Walloon Region. Anyone dreaming of giving our regions significantly more financial responsibility must have as a top priority giving the Brussels Region too a coherent and comprehensive package of competences, and above all the power to regulate its education system. Let us be frank: this would be a significant move towards making Belgium a simple federation of regions. But it is hard to think of a major and intelligent institutional reform that would not involve a decisive move towards such a straightforward, classic territorial federalism.

Focusing on the Brussels region also forces us to think harder on another central aspect of both proposals taken for granted so far. If people tend to work and sleep in the same region, it makes little difference whether the tax base to which we want to link more closely the region's revenues is attached to the place where people work or to the place where people sleep. If we were just talking of the Flemish and Walloon Regions, this would hardly make a difference. But about half the people working in the Brussels Region sleep in one of the other two Regions. At first sight, the implication is obvious. Is the point of regional "responsibilization" to encourage regional authorities to favour the creation of productive jobs or of comfortable bedrooms? Surely the former. In a context in which people's workplace and residence cannot be assumed to be overwhelmingly in the same region, it therefore seems obvious that the tax base to which regional revenues should be made more sensitive is the value added generated in the region. This could be done, for example, by making regions share in the corporation tax levied on the businesses located in the region or in the social security contributions paid by (or on behalf of) the people working in the region, whether or not these are residents. By contrast, making the regions share more significantly in the yield of the income taxes paid by the people sleeping in the region — as both proposals recommend — seems a particularly weird idea.

This reasoning is far too simple, however. For how many jobs can be generated in the Brussels region and how productive they are is affected by the education, training, activation, public health or mobility policies that are being implemented in its Flemish and Walloon hinterland. And conversely, the people educated, trained, activated, cared for or transported in Brussels must be enabled to take up jobs in Zaventem or Rixensart. That this should happen far more than now is certainly part of what the Brussels government, once put in charge of education, should see as its central mission, in particular by making its fast growing young population far more trilingual than the youth of the Flemish and Walloon periphery, and not less as is currently the case. What follows from these key features of the situation in and around Brussels? That proper responsibilization of the regions should make their revenues dependent not only on the incomes earned in the region, but also on the incomes of the people living in the region? In other words, that we should go for some sort of compromise between what commonsense suggests and what is assumed both in the current system and in both proposals ? Not exactly.

The fundamental point is rather that the externalities are of such a magnitude that the room for sensible responsibilization is unfortunately quite limited. The Brussels Region is simply the cosmopolitan central neighbourhood of a much larger cosmopolitan area.[60] Externalities would no doubt be far more limited if Brussels were simply swallowed by the Flemish Region, or if Brussels expanded so as to absorb both Vlaams Brabant and Brabant wallon. True, they would not vanish altogether under these scenarios, but they would become sufficiently manageable for the pursuit of efficiency — if not of distributive justice — to be consistent with a high degree of financial responsibilization, indeed even, arguably, with separation into two or three sovereign states. But whether we find it regrettable or not, we all know that neither of these scenarios will ever happen, and efficiency-minded economists will therefore have to reconcile themselves with the idea of putting up, not only with the Belgian federal state, but also with a very modest degree of regional responsibilization.

It is the merit of both pieces to explore what can be meaningfully done in this direction, not with vague slogans but with explicit, precise and honest proposals. It is partly because such proposals are specific enough to lend themselves to careful scrutiny and assessment that they will help us correct some of the undeniable defects of the present arrangements.

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[60] See Thisse & Thomas (2010).

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